

Actuarial assistance



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Julie Ekdorn of Bartlett Actuarial Group outlines the ways in which actuaries can provide the financial platform for establishing a captive

Initial Discussion

Actuaries are business professionals who analyse the financial impact of risk. They can assist you in determining whether a captive makes sense for you by helping to address questions such as:

- How will the cost of a captive compare to the cost of traditional insurance?
- What coverages can/should I include in my captive?
- Can these coverages be written directly, or will a fronting carrier be required?
- Should my captive purchase reinsurance and, if so, how much?
- What other service providers will I need and what are the associated costs?
- What domicile is likely to be the best fit for my captive?
- How much capital will be required?

Feasibility study

A detailed, well-supported feasibility study prepared by a qualified actuary may speed up the captive-licensing process. This study will become the foundation of the application that must be submitted for approval by the regulators in the intended domicile. Requirements and regulatory review processes vary by domicile, but in the US the application must include a loss forecast and five-year pro forma financial projections for the captive.

Actuaries may use a number of different methods to forecast losses. For example:

- Actual historical loss experience for the entity or entities to be insured by the captive may be used. Where available, this is the recommended approach because it reflects the unique nature of the particular business and, in many cases, may serve as justification for the

use of a more favorable than average loss forecast.

- Where the historical loss experience of the entity or entities to be insured is unavailable or not fully credible, the actuary may use relevant industry data.
- In situations where the insurance product to be offered by the captive is new or substantively unique, the actuary may use sophisticated mathematical and statistical techniques to forecast losses. The actuary should work with you to develop reasonable and well-supported estimates of loss frequencies and severities. Once established, these estimates can be incorporated into a loss model. Using simulation techniques, the actuary can then model the expected losses and confidence levels for the captive.

The loss forecast is added to the projected expenses for the captive in order to determine the indicated premium need. Typical expenses for a captive may include fronting fees, reinsurance costs, captive management fees, actuarial services, legal fees, accounting and audit costs, claims management expenses, and taxes. This information is incorporated into the five-year pro forma financial projections in order to determine the appropriate capital level. A premium-to-capital ratio of 3:1 is generally advisable; however, ratios of 5:1 or higher may be accepted in offshore domiciles.

The pro forma financial projections will include a balance sheet, a statement of income, and a statement of cash flow. Any assumptions underlying the projections should be clearly disclosed, including projected interest rates, tax rates, dividend

rates, trend rates, and loss development patterns. The actuary should prepare these exhibits under both an “expected case” and an “adverse case” scenario. This provides the prospective captive owner and captive regulator with a financial picture of the captive under expected conditions as well as a stress test of the potential financial stability of the captive under less favorable circumstances.

Ongoing support

Once the captive is established the actuary can provide continuing assistance in several ways. In many domiciles, captives are required to submit an annual actuarial opinion regarding the adequacy of the carried reserves. Actuaries also assist with regular rate reviews and can prepare price-monitoring studies to assure that group premiums are being charged in compliance with the filed rating plan. They can also perform claims monitoring studies to help identify trends and to assess the performance of your claims administrator.

It’s important to engage an actuary with whom you can have an open and honest relationship. You should feel comfortable sharing any questions or concerns you may have about the financial performance of your captive. Your actuary should take a sincere and vested interest your program, and should make ongoing recommendations to help assure the continued financial success of your captive.

The actuaries of Bartlett Actuarial Group are William Bartlett, FCAS, MAAA; Julie Ekdorn, ACAS, MAAA, ASLI, ARM; James Hall, FCAS, MAAA; Legaré Gresham, FCAS MAAA; and Brian Johnson, ACAS, MAAA